

# **ABSTRACT**

## **Background**

Febrile seizures (FS) are a form of acute symptomatic seizures. They occur in 2% to 5% of children and are the most common form of childhood seizures. Iron deficiency anemia is more prevalent in developing countries like india especially in children. The association between the iron deficient state and febrile convulsions has been described in several studies with conflicting results.

## **Objective:**

To study the haematological indices suggestive of IDA in febrile convulsions and to determine possible association and the degree of association between IDA and FS.

**Material And Methods:** The study was a case control prospective study conducted on 75 children(6-60 months of age)presenting with febrile seizures a in Department of Paediatrics ,Tirunelveli Medical College Hospital, Tirunelveli from january 2016 to June 2017. Controls were children with febrile illness without seizures. The blood samples from the cases and the controls are analysed for Hb, MCV, MCH, serum ferritin levels.

**Results:** Mean age of presentation of febrile seizures is 21.4 +/- 9.7 months. Mean Hb, MCH, MCV, Serum ferritin were significantly lower in febrile seizures comparing to the controls.

**Conclusion:** Iron deficiency anaemia was more frequent among children with febrile seizures than those with febrile illness alone. The result suggests that Iron deficiency anaemia may be a risk factor for febrile seizures.

**Key words:** Febrile seizure(FS), Iron deficiency anemia(IDA),serum ferritin.